

Commonwealth of Kentucky
Division for Air Quality
PERMIT STATEMENT OF BASIS

Title V Permit No. V-02-030 Revision 1

U.S. Army Center and Fort Knox

Fort Knox, Kentucky 40121

April 28, 2004

Ben Markin, Reviewer

Plant I.D. #: 21-093-00022

Application Log #: 56473

INITIAL SOURCE DESCRIPTION:

An operating permit revised application received from U.S. Army Center and Fort Knox on March 06, 2002 was considered administratively complete on September 09, 2002. The applicant proposes to operate natural gas/oil-fired heat exchangers, storage tanks, spray booths and degreaser at their existing facility in Fort Knox, Kentucky.

MINOR REVISION 1—ADDITION OF INSIGNIFICANT ACTIVITIES

Fort Knox applied to the Division on April 7, 2004 and April 8, 2004 for the addition of two new 359 gallons per minute cooling towers to existing boilers, and twelve natural gas fired heaters at 60,000 Btu/hr each for the three new school buildings at their facility. In accordance with 401 KAR 52:020, Section 6, emissions from all twelve units is less than 2 tons of each regulated air pollutant, therefore, they have been classified as insignificant units. Additionally, a paint booth, two natural gas fired indirect heat exchangers less than 1mmBtu, and a 2 mmBtu natural gas fired indirect heat exchanger approved under 401 KAR 52:020, Section 17, Off permit changes and Section 18, 502 (b)(10) in 2003 have been added to the insignificant activity list in the permit.

COMMENTS:

Based on the information provided, Regulation 401 KAR 59:015 and 60:005 incorporating by reference 40 CFR 60 Subpart Dc apply to the boilers constructed after 1972, including the permitted boiler in 1999, while Regulation 401 KAR 61:015 apply to the other boilers. Regulation 401 KAR 59:010 applies to the spray booths, and paint machines.

Specifically, the allowable emissions limits of 0.10 and 0.31 lb/MMBTU from Regulation 401 KAR 59:015 Section 4 and 61:015, Section 4 apply to particulate matter (PM) emissions generated while burning natural gas and residual oil respectively. The allowable sulfur dioxide emission limit of 0.80 lb/MMBTU and 1.06 lb/MMBTU from Regulation 401 KAR 59:015 Section 5 and 61:015, Section 5, apply to natural gas and residual oil respectively.

Emissions were calculated based on AP 42(7/98) tables 11-3.1 and 1-4. The results of the analysis are summarized in the air quality analysis and indicate that the standards will not be exceeded. Since this review has determined that all requirements will be met, a preliminary determination that an operating permit may be issued as conditioned, but contingent to the satisfactory resolution of any adverse public comments which might be received, has been made.

Particulate emissions from the spray booths are subject to the provision of Regulation 401 KAR 59:010. Fabric filters will control particulate emissions from the spray booth, emission point 11. The spray booth air handling system will utilize enclosed construction and fabric filters to eliminate fugitive emissions. Methods of measurement for emissions shall be adhered to as specified in Regulation 401 KAR 55:015. The amount of paint to be used for the paint booths shall not equal or exceed 20,571 gallons per year.

PERIODIC MONITORING:

None

EMISSION AND OPERATING CAPS DESCRIPTION:

None

OPERATIONAL FLEXIBILITY:

None

CREDIBLE EVIDENCE:

This permit contains provisions which require that specific test methods, monitoring or recordkeeping be used as a demonstration of compliance with permit limits. On February 24, 1997, the U.S. EPA promulgated revisions to the following federal regulations: 40 CFR Part 51, Sec. 51.212; 40 CFR Part 52, Sec. 52.12; 40 CFR Part 52, Sec. 52.30; 40 CFR Part 60, Sec. 60.11 and 40 CFR Part 61, Sec. 61.12, that allow the use of credible evidence to establish compliance with applicable requirements. At the issuance of this permit, Kentucky has not incorporated these provisions in its air quality regulations.

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